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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/643,748	08/19/2003	Joel D. Oxman	58614US002	4133
32692	7590	12/05/2006	EXAMINER	
3M INNOVATIVE PROPERTIES COMPANY			WILSON, JOHN J	
PO BOX 33427			ART UNIT	
ST. PAUL, MN 55133-3427			PAPER NUMBER	

3732

DATE MAILED: 12/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

NIT

Office Action Summary

Application No.

10/643,748

Applicant(s)

OXMAN ET AL.

Examiner

John J. Wilson

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9, 11-39 and 42-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9, 11-39 and 42-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 11/2/06.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date: _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-9, 11, 12, 16-24, 26, 28-35 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kennedy (4129946) in view of Neustadter (3565387) and Ivanov et al (4113499). Kennedy shows a dental form 10 made of an organic composition, a co-polyester plastic, and including a reservoir as shown for filling with a hardenable dental material. Kennedy does not show the form being malleable. Neustadter shows using a malleable material, column 2, lines 54-57. It would be obvious to one of ordinary skill in the art to modify Kennedy to include using a malleable material as shown by Neustadter in order to obtain the desired final shape that best matches the other teeth. The above combination does not show using a composition that contains a surfactant. Ivanov teaches using a surfactant, column 3, lines 4-10, to improve the strength of a disposable mold form. It would be obvious to one of ordinary skill in the art to modify the above combination to include using a composition that includes a surfactant as shown by Ivanov in order to solve the problem of including sufficient strength in a mold form. As to claim 2, Neustadter further shows using a curable composition, column 2, lines 40-48, and as to claims 4, 5, 17 and 18, the use of

curable of non-curable composition is held to be an obvious matter of choice in well known plastic compositions to one of ordinary skill in the art. As to claim 3, to use an initiator with a curable composition is well known. As to claims 6 and 18-20, Ivanov shows using a surfactant with filler. As to claims 7-9 and 19-21, the specific type of filler material used is an obvious matter of choice in known filler materials to the skilled artisan. As to claims 24, 26 and 33, the shown structure is capable of being removed or not removed, and as such, the intended use of the shown structure is not given patentable weight. As to claim 28, to not use filler is an obvious matter of choice in the use or non use of known parameter to obtain the desired properties.

Claims 13, 14, 25 and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kennedy (4129946) in view of Neustadter (3565387) and Ivanov et al (4113499) as applied to claims 1, 16 and 28 above, and further in view of Uthoff (5102332). The above combination does not show using a package that can block light. Uthoff teaches using a package 2 that can block light. It would be obvious to one of ordinary skill in the art to modify the above combination to include a package as shown by Uthoff in order to ship and protect the article.

Claims 15, 27 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kennedy (4129946) in view of Neustadter (3565387) and Ivanov et al (4113499) as applied to claims 1, 16 and 28 above, and further in view of Kahn (3949476). Kennedy shows a handle, however, the above combination does not show a handle removed

from the base. Kahn teaches using a handle 18, column 2, lines 29-34, that as shown, is removed from the base. It would be obvious to one of ordinary skill in the art to modify the above combination to include a handle as shown by Kahn in order to better manipulate the article in the mouth.

Claims 39 and 42-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Simor (3585723) in view of Neustadter (3565387), Ivanov et al (4113499) and Wilson (5487663). Simor shows the method step of selecting an article form 10, column 5, lines 53-55, filling the form with a hardenable material, column 6, lines 21-2, placing the form on a tooth, column 6, lines 26-29, hardening the material, column 1, lines 66-71, cementing to the tooth as shown and reshaping the article form in the subject's mouth, column 6, lines 55-58, and column 8, lines 65-71. Simor does not show using an organic composition. Neustadter shows using an organic composition, column 2, lines 40-48. It would be obvious to one of ordinary skill in the art to modify Simor to use an organic composition as shown by Neustadter in order to make use of known plastics for making a tooth form. The above combination does not show using a composition that contains a surfactant. Ivanov teaches using a surfactant, column 3, lines 4-10, to improve the strength of a disposable mold form. It would be obvious to one of ordinary skill in the art to modify the above combination to include using a composition that includes a surfactant as shown by Ivanov in order to solve the problem of including sufficient strength in a mold form. The above combination does not show the step of removing the form. Wilson teaches that it is known to use a crown form as part of the

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final crown as taught by Simor, or in the alternative, to remove the form, see the Abstract of Wilson. It would be obvious to one of ordinary skill in the art to modify the above combination to include removing the form as taught by Wilson in order to make use of known alternatives in the art to obtain the desired final dental article. To use a curable or non-curable plastic is an obvious matter of choice in well known plastics to one of ordinary skill in the art.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-9, 11-39 and 42-44 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-54, 56-73, 75 and 79-83 of copending Application No. 10/219,398 in view of Neustadter (3565387). The claims of the '398 application teach using an organic composition that is self-supporting and malleable, however, do not show using a form that is capable of being filled. Neustadter teaches using a form that is capable of being

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filled. It would be obvious to one of ordinary skill in the art to modify the '398 claims to include a form as shown by Neustadter in order to obtain the desired size and shape. To include a reservoir of material would have been obvious in order to supply the needed filling material. The specific material used is an obvious matter of choice in known plastics to the skilled artisan. To use a handle would have been obvious to one of ordinary skill in the art in order to better manipulate the form.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Response to Arguments

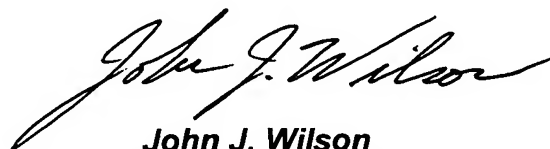
Applicant's arguments filed October 27, 2006 have been fully considered but they are not persuasive. Kennedy teaches using a composition that better holds its dimensions, column 3, lines 36-39. Applicant refers to the disclosure to define free-standing and dimensionally stable, however, Kennedy teaches using a dimensionally stable composition, the time for which it may be stable is merely a matter of choice in a known parameter to one of ordinary skill in the art. It is further noted that claims 1, 16, 28 and 39 claim an article comprising a compound, and as such, does not limit the actual article to not including other structure. As such, the claim is directed to an article that includes a composition, where the composition used has the claimed properties. As stated, Kennedy teaches using a composition that is stable, the degree of this property is an obvious matter of choice in the degree of a known property to the skilled artisan.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John J. Wilson whose telephone number is 571-272-4722). The examiner can normally be reached on Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cris Rodriguez, can be reached at 571-272-4964). The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



John J. Wilson
Primary Examiner
Art Unit 3732

jjw
November 29, 2006